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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. 6133 | |
|---|------------------------|----------------------|-------------------------|-----------------------|--|
| 09/436,092 | 11/08/1999 | EBRAHIM ANDIDEH | 043290.P3955 | | |
| 75 | 590 11/07/2002 | | | | |
| DARREN J M | | EXAMINER | | | |
| BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP 12400 WILSHIRE BOULEVARD | | | MCDONALD, SHANTESE L | | |
| SEVENTH FLO | OOR S, CA 900251026 | | ART UNIT | PAPER NUMBER | |
| 2007HVGEDE | 5, 611 700201020 | | 3723 | | |
| | | | DATE MAILED: 11/07/2002 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.





Office Action Summary

Application No. 09/436,092

Applicant(s)

Andideh et al.

Examiner

McDonald, Shantese

Art Unit **3723**



| The MAILING DATE of this communication appears on the cover sheet with the correspondence address | | | | | | | |
|---|---|-----------------------|------------------------------------|--------------------|--|--|--|
| | or Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the | | | | | | | |
| mailing | date of this communication. | | | . , , | | | |
| - If NO p - Failure - Any rej | period for reply specified above is less than thirty (30) days, a reply within the period for reply is specified above, the maximum statutory period will apply at to reply within the set or extended period for reply will, by statute, cause the ply received by the Office later than three months after the mailing date of the patent term adjustment. See 37 CFR 1.704(b). | nd will o e applic | expire SIX (6) I ation to becom | MONTHS from ABANDO | om the mailing date of this communication. NED (35 U.S.C. § 133). | | |
| Status | | | | | | | |
| 1) 💢 | Responsive to communication(s) filed on Jul 16, 20 | 02 | | | • | | |
| 2a) 💢 | This action is FINAL . 2b) ☐ This acti | on is | non-final. | | | | |
| 3) 🗆 | Since this application is in condition for allowance e closed in accordance with the practice under Ex par | | | | • • | | |
| Disposit | tion of Claims | | | | | | |
| 4) 💢 | Claim(s) <u>54-67</u> | | | | is/are pending in the application. | | |
| 4 | a) Of the above, claim(s) | | | | is/are withdrawn from consideration. | | |
| 5) 🗆 | Claim(s) | | | | is/are allowed. | | |
| 6) 💢 | Claim(s) <u>54-67</u> | | | | is/are rejected. | | |
| 7) 🗆 | Claim(s) | | | | is/are objected to. | | |
| 8) 🗌 | Claims | | are | subject | to restriction and/or election requirement. | | |
| Applica | tion Papers | | | | | | |
| 9) 🗆 | The specification is objected to by the Examiner. | | | | | | |
| 10)□ | The drawing(s) filed on is/are | a) 🗌 | accepted | d or b) | \Box objected to by the Examiner. | | |
| | Applicant may not request that any objection to the di | rawin | g(s) be hel | d in abey | vance. See 37 CFR 1.85(a). | | |
| 11) | The proposed drawing correction filed on | | is: | a) 🗆 a | pproved b) \square disapproved by the Examiner. | | |
| | If approved, corrected drawings are required in reply t | o this | Office act | ion. | | | |
| 12) | The oath or declaration is objected to by the Exami | ner. | | | | | |
| Priority | under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) 🗌 | 3) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) [| ☐ All b)☐ Some* c)☐ None of: | | | | | | |
| | 1. \square Certified copies of the priority documents have | e bee | n received | j. | | | |
| | 2. \square Certified copies of the priority documents have | e bee | n received | d in App | lication No | | |
| | 3. Copies of the certified copies of the priority do application from the International Burea | au (P | CT Rule 1 | 7.2(a)). | - | | |
| _ | ee the attached detailed Office action for a list of the | | • | | | | |
| . — | Acknowledgement is made of a claim for domestic | | | | | | |
| a)∟ ₄⊏\□ | , | | | | | | |
| 15) 🗔 | Acknowledgement is made of a claim for domestic | prior | ity under 3 | 35 U.S.C | J. 99 120 and/or 121. | | |
| Attachm | ent(s) tice of References Cited (PTO-892) | 41 <u> </u> |) | (DTO | 413) Pages Ne/-) | | |
| | tice of Draftsperson's Patent Drawing Review (PTO-948) | | | | -413) Paper No(s) Application (PTO-152) | | |
| 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s). | | | | | | | |
| | · | | | | | | |

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DETAILED ACTION

The Examiner notes that the Burke et al. reference is 5,645,469, and the Sandhu et al. reference is 5,730,642.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 54,55,58-60 and 63-65 are rejected under 35 U.S.C. 102(b) as being anticipated by Burke et al. ('469).

Burke et al teaches a polishing pad 130, having a center area (fig 8), and an edge area, with a first set of grooves located in the center area with a first depth, first width, and first density, a second set of grooves located in the edge area with a second set of grooves having a second depth, second width and a second density. Burke et al. also teaches that the first depth, width and density is smaller than the second depth, width and density, and that the first set of grooves and the second set of grooves differ in shape.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 56,57,61,62,66 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burke et al. ('469).

Burke et al. teaches all the limitations of the claims except for the first and second depths being within a range of 1-90% pad thickness, the first and second widths being within the range of 1-100 mils, and the first and second densities being withing a range of 2-50 grooves/inch. It would have been obvious to one having ordinary skill in the art at the time the invention was made, to make the polishing pad of Burke et al. with the first and second depths being within a range of 1-90% pad thickness, the first and second widths being within the range of 1-100 mils, and the first and second densities being withing a range of 2-50 grooves/inch, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

5. Applicant's arguments filed 7/16/02 have been fully considered but they are not persuasive.

The applicant is arguing that the polishing pad center and edge areas do not correspond with the wafers center and edge area. If the wafer is placed on the polishing pad, then depending on the size of the wafer and the location it is placed, the center and edge areas will correspond.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date

of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Shantese McDonald whose telephone number is (703) 308-8722.

Joseph J. Hail, III Supervisory Patent Examiner

Junt q. Hails

Technology Center 3700

S.L.M.

October 21, 2002